

Clad Inswing & Outswing Door Installation Instructions

Please read installation instructions carefully before starting.

This section includes installation instructions for single and double clad swing doors.

Installation of Unit:

1. Check rough opening to insure that opening is level, plumb and square. Verify that width and height dimensions are correct. Rough opening should be 3/4" wider than overall frame width and 3/4" greater than overall frame height. Sill plate or concrete slab should be flat and level. Make sure opening, specifically the sub floor (or concrete), is dry, clean and free of dirt and debris.

✓ **Note:** Flashing and/or an appropriate method of sealing shall be designed as a part of an overall weather resistive barrier system. It is not the responsibility of the window manufacturer to design or recommend a flashing system appropriate for each job condition.

✓ **Note:** Self-adhered flashing material is recommended to be at least 9" wide.



Caution: Any variance from this installation procedure signifies that proper waterproofing becomes the responsibility of the design professional and/or the installer.

2. Sill Pan. Sierra Pacific strongly recommends the use of a sill pan. A rigid or flexible membrane pan may be used depending upon project specifications and installation conditions. Installation should be compliant with ASTM E 2112 "*Standard Practice for Installation of Exterior Windows, Doors and Skylights.*" Figures 3, 4 and 5 illustrate installation using a rigid sill pan..
3. An overview of the proper flashing sequence is shown in Figure 1.

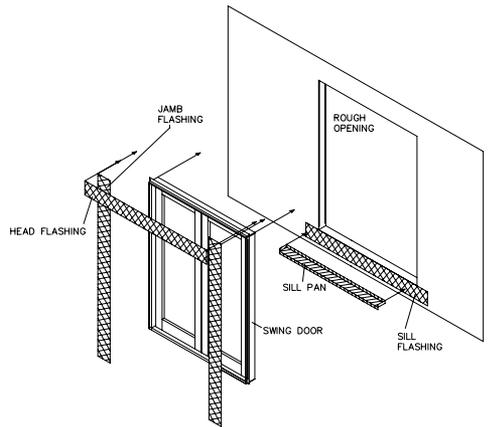


Figure 1

4. Begin flashing of the rough opening (RO) by applying flashing material along the exterior edge of the sill plate (see figure 2). Make sure that the flashing extends 8 1/2" beyond both sides of the RO. Next, apply two continuous beads of polyurethane sealant across the width of the sill, approximately 1/2" - 1" in from the interior and exterior edges of the RO (see figure 3). The sealant should extend 6" up each side of frame members. One additional bead should be applied along the exterior vertical edge of the sill plate as shown. This will create a seal between the sill pan and the sill. Set the sill pan in place (see figure 4) and make sure that it is fully seated in the sealant, especially the front lip.

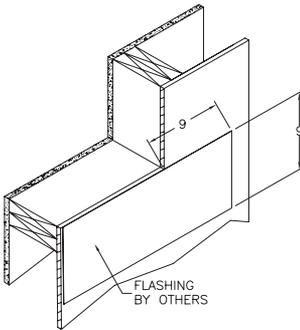


Figure 2

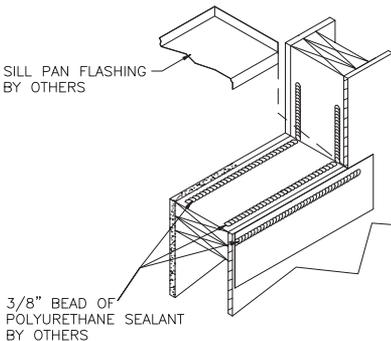


Figure 3

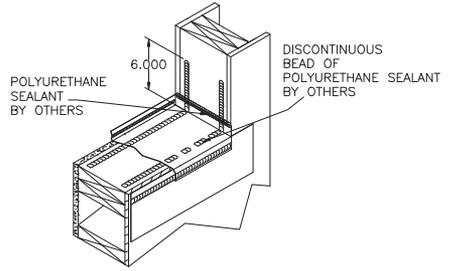


Figure 4

5. Once in place, apply a bead of sealant across the vertical back leg of the sill pan. The bead should be continuous and extend the entire length of the sill pan. A discontinuous bead should then be applied near the exterior edge of the sill pan. Complete the sealant application by applying a bead along the top lip of the sill pan end to seal between the pan and the rough framing (see figure 5).

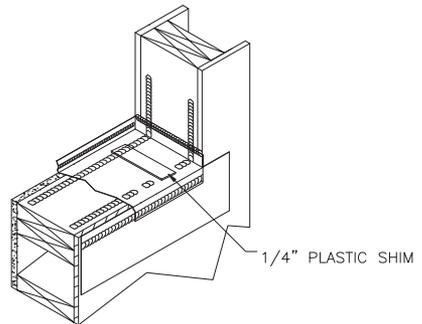


Figure 5

6. Prior to setting the door into the sill pan, place 1/4" non-compressible, plastic shims onto the sill pan as shown (see figure 5). Space shims 1 to 2 inches from each end and then approximately every 12 inches thereafter.

7. Apply a continuous nominal bead of sealant along the backside of the nailing flange, along both side jambs and head. Run additional sealant across the 45° joint where the flanges meet (see figure 6).

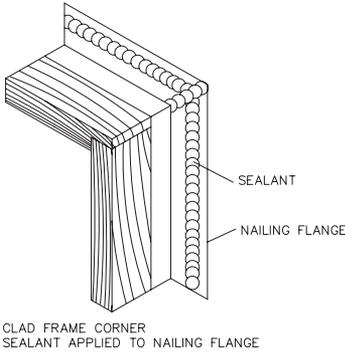


Figure 6

8. Insert and center the door in the rough opening. When doing so, tilt the door back so that the sill can be set into the opening and onto the sealant and not scrape it off the sill pan (see figure 7).

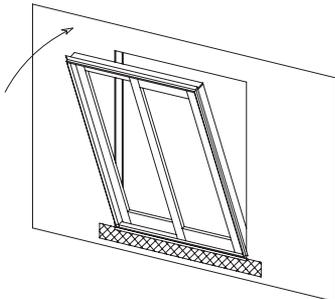


Figure 7

9. With the door set into the rough opening, check to make sure it is centered. Tack the door in place with one 1-1/2" stainless steel screw (or equivalent) in the top nailing flange within 3" - 6" of each corner. Make sure that the sill is straight, flat and level. Use a tape measure to check the diagonal dimensions of the frame to ensure the frame is square (see figure 8). Diagonal measures should be within 1/8". This measure should be double-checked by using a framing square. Shim at the top of the side jambs as required. Use a level or straight edge to ensure the jambs are straight. Also, check frame width across top, middle and bottom. Width measures should be within 1/16".

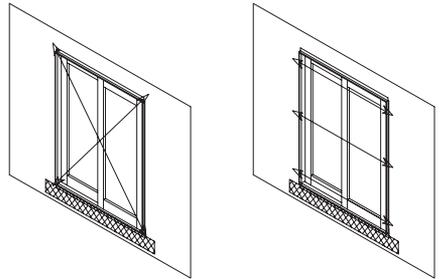


Figure 8



Important: Proper shimming is required to ensure the unit will perform properly.

10. Remove from the hardware bag the construction handle and #12x3" screws. Insert one #12x3" screw into the one empty screw hole per hinge (see figure 9). Again, note that each hinge needs to be shimmed (see figure 10). Each 3" screw must be screwed into the trimmer stud to ensure proper anchoring of the door. This is critical for proper support of the swinging panels.



Figure 9



Figure 10

✓ **Note:** For swing doors with a stationary sidelight attached (mulled), it is still important for the door to be properly shimmed. For this application, shims should be applied between the sidelight side jamb and the rough stud framing. Place shims directly opposite each hinge position on the operable door (see figure 11). If a double operable door has sidelights attached to both sides, both sidelights will require shims.

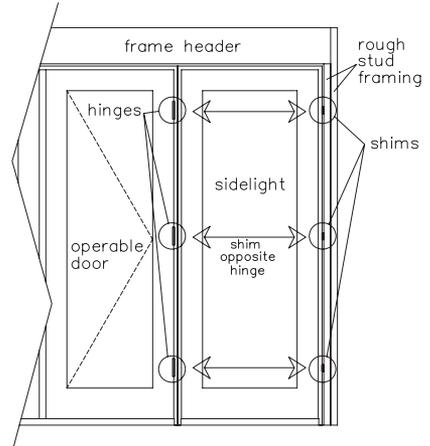


Figure 11

11. Once each hinge has been anchored, confirm that the door panels are properly hung and aligned in the frame (see figure 12). The reveal between the panel(s) and the frame should be 1/8". It should be even along both sides and the top of the door. Remember, each hinge must be shimmed.

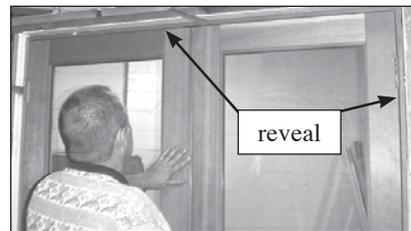


Figure 12

✓ **Note:** For fine adjustment, thin shims have been placed behind the leaves of each hinge. Remove or add as required.

12. The top frame member should also be anchored to the header by predrilling and screwing in the same fashion as the side jambs (see figure 13). Although shimming is not required along the full length of the header, shimming and attachment at the head strike plate is necessary. Use the #8x3" screw provided in the hardware bag.

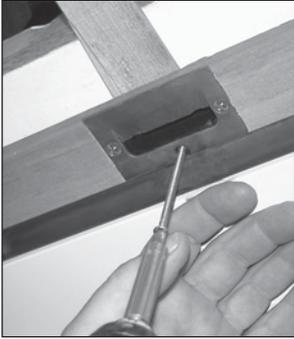


Figure 13

13. Installation instructions for the finish hardware is supplied in the hardware box. Please follow these instructions. Upon completion of the hardware installation, make sure that the multi-point hardware engages correctly at the head and sill strikes.

14. Once door is properly installed, anchored and operating correctly, finish securing the nailing flange.

15. Secure the nailing flange to the sheathing with 1-1/2" stainless steel screws, beginning 3" - 4" from the corner and 12" - 16" thereafter.

16. Place a small amount of polyurethane over each screw head.

17. With the unit completely secured to the structure, apply a bead of sealant at the edge of the head jamb nailing flange where it meets the sheathing. Also, apply similar beads of sealant between the edge of the side jamb nailing flange and the flashing material. Tool the sealant into the joint to ensure the joint is filled.

18. Apply a layer of flashing over the side jamb nailing flange (see figure 14). The length of the flashing should equal the height of the RO + (2x width of the flashing material) - 1". Install the flashing so that the edge contacts the inside corner of the nailing flange. The top of the flashing should extend only 8-1/2" above the top edge of the window frame. Make sure that the side flashing overlaps and covers the ends of the sill flashing. Repeat for opposite side.

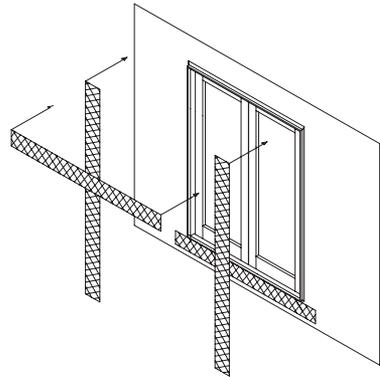


Figure 14

19. The length of the head flashing should equal width of RO + (2x width of the flashing material) + 2". Extend 1" beyond edge of each side flashing (see figure 15). Attach top edge of flashing to the wall.

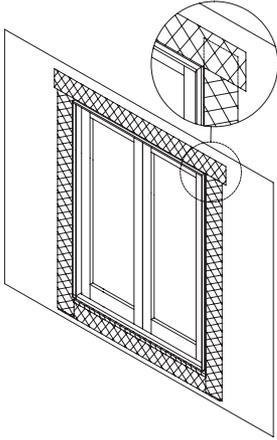


Figure 15

20. Complete installation by applying sealant around the perimeter of the unit after the exterior wall finish has been applied.

21. Some installations will require sill nose support. See Figure 16 for typical applications.

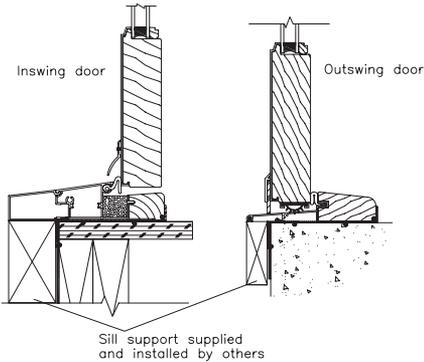


Figure 16